

WE CLAIM:

Fig 6

1 1. A method of crediting viewing with respect to
2 a viewing window being displayed on a screen, wherein the
3 viewing window has a size, wherein the screen has a size,
4 and wherein the method comprises the following steps:

5 a) applying a predetermined crediting rule to the
6 viewing window; and,

7 b) crediting viewing with respect to the viewing
8 window only if the viewing window meets the predetermined
9 crediting rule.

1 2. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization, and wherein step b) comprises the step of
4 crediting viewing with respect to the viewing window only if
5 the viewing window is not minimized.

1 3. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimum window size, and wherein step b) comprises the step
4 of crediting viewing with respect to the viewing window only

5 if the size of the viewing window is greater than the
6 minimum window size.

1 4. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises an
3 amount of occlusion of the viewing window, and wherein step
4 b) comprises the step of crediting viewing with respect to
5 the viewing window only if the amount of occlusion of the
6 viewing window is less than a maximum occlusion.

1 5. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises a
3 percentage of the screen occupied by the viewing window, and
4 wherein step b) comprises the step of crediting viewing with
5 respect to the viewing window only if the percentage of the
6 screen occupied by the viewing window is greater than a
7 minimum percentage.

1 6. The method of claim 1 wherein the viewing
2 window is a first viewing window, wherein a second viewing
3 window is displayed on the screen, wherein audio is being
4 played with respect to one of the first and second viewing
5 windows, and wherein step b) comprises the step of crediting

6 viewing only with respect to the one of the first and second
7 viewing windows associated with the audio.

1 7. The method of claim 1 wherein the viewing
2 window is a first viewing window, wherein a second viewing
3 window is displayed on the screen, wherein one of the first
4 and second viewing windows is larger, and wherein step b)
5 comprises the step of crediting viewing only with respect to
6 the larger of the first and second viewing windows.

1 8. The method of claim 1 wherein the viewing
2 window is a first viewing window, wherein a second viewing
3 window is displayed on the screen, wherein one of the first
4 and second viewing windows is a top-most viewing window, and
5 wherein step b) comprises the step of crediting viewing only
6 with respect to the top-most viewing window.

1 9. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization and minimum window size, and wherein step b)
4 comprises the step of crediting viewing with respect to the
5 viewing window only if the viewing window is not minimized

1 and the size of the viewing window is greater than the
2 minimum window size.

1 10. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization and amount of occlusion of the viewing window,
4 and wherein step b) comprises the step of crediting viewing
5 with respect to the viewing window only if the viewing
6 window is not minimized and the amount of occlusion of the
7 viewing window is less than a maximum occlusion.

1 11. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization and a percentage of the screen occupied by the
4 viewing window, and wherein step b) comprises the step of
5 crediting viewing with respect to the viewing window only if
6 the viewing window is not minimized and the percentage of
7 the screen occupied by the viewing window is greater than a
8 minimum percentage.

1 12. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimum window size and an amount of occlusion of the
4 viewing window, and wherein step b) comprises the step of
5 crediting viewing with respect to the viewing window only if
6 the size of the viewing window is greater than the minimum
7 window size and the amount of occlusion of the viewing
8 window is less than a maximum occlusion.

1 13. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimum window size and a percentage of the screen occupied
4 by the viewing window, and wherein step b) comprises the
5 step of crediting viewing with respect to the viewing window
6 only if the size of the viewing window is greater than the
7 minimum window size and the percentage of the screen
8 occupied by the viewing window is greater than a minimum
9 percentage.

1 14. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises an
3 amount of occlusion of the viewing window and a percentage
4 of the screen occupied by the viewing window, and wherein

1 step b) comprises the step of crediting viewing with respect
2 to the viewing window only if the amount of occlusion of the
3 viewing window is less than a maximum occlusion and the
4 percentage of the screen occupied by the viewing window is
5 greater than a minimum percentage.

1 15. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization, minimum window size, and an amount of
4 occlusion of the viewing window, and wherein step b)
5 comprises the step of crediting viewing with respect to the
6 viewing window only if the viewing window is not minimized
7 and the size of the viewing window is greater than the
8 minimum window size and the amount of occlusion of the
9 viewing window is less than a maximum occlusion.

1 16. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization, minimum window size, and a percentage of the
4 screen occupied by the viewing window, and wherein step b)
5 comprises the step of crediting viewing with respect to the
6 viewing window only if the viewing window is not minimized
7 and the size of the viewing window is greater than the

1 minimum window size and the percentage of the screen
2 occupied by the viewing window is greater than a minimum
3 percentage.

1 17. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimum window size, an amount of occlusion of the viewing
4 window, and a percentage of the screen occupied by the
5 viewing window, and wherein step b) comprises the step of
6 crediting viewing with respect to the viewing window only if
7 the size of the viewing window is greater than the minimum
8 window size and the amount of occlusion of the viewing
9 window is less than a maximum occlusion and the percentage
10 of the screen occupied by the viewing window is greater than
11 a minimum percentage.

1 18. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization, an amount of occlusion of the viewing window,
4 and a percentage of the screen occupied by the viewing
5 window, and wherein step b) comprises the step of crediting
6 viewing with respect to the viewing window only if the
7 viewing window is not minimized and the amount of occlusion

1 of the viewing window is less than a maximum occlusion and
2 the percentage of the screen occupied by the viewing window
3 is greater than a minimum percentage.

1 19. The method of claim 1 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization, minimum window size, an amount of occlusion of
4 the viewing window, and a percentage of the screen occupied
5 by the viewing window, and wherein step b) comprises the
6 step of crediting viewing with respect to the viewing window
7 only if the viewing window is not minimized and the size of
8 the viewing window is greater than the minimum window size
9 and the amount of occlusion of the viewing window is less
10 than a maximum occlusion and the percentage of the screen
11 occupied by the viewing window is greater than a minimum
12 percentage.

1 20. The method of claim 1 wherein steps a) and b)
2 are implemented by software written in Java.

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1 21. A method of metering video displayed in a
2 window on a screen of a viewing device comprising the
3 following steps:

4 a) determining whether the viewing device has a
5 COM interface or an API interface;

6 b) if the viewing device has a COM interface,
7 determining channel data from a channel related object of
8 the COM interface, and,

9 c) if the viewing device has an API interface,
10 calling the API interface so as to determine channel data
11 associated with a video application.

1 22. The method of claim 21 comprising the further
2 following step:

3 d) determining a program and/or station from an
4 electronic programming guide based upon the channel data
5 determined in step b) or c).

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1 23. The method of claim 21 comprising the further
2 following step:

3 d) if the viewing device has neither a COM
4 interface nor an API interface, determining channel data
5 from window controls within a viewing application.

1 24. The method of claim 23 comprising the further
2 following step:

3 e) determining a program and/or station from an
4 electronic programming guide based upon the channel data
5 determined in step b) or c).

1 25. The method of claim 23 comprising the further
2 following steps:

3 e) finding main windows;

4 f) finding a video application main window from
5 the main windows found in step e);

6 g) finding child windows of the video application
7 main window found in step f);

8 h) finding a channel related child window from the
9 child windows found in step g); and,

10 i) determining channel data from the channel
11 related child window found in step h).

1 26. The method of claim 25 wherein step f)
2 comprises the following step:

3 using a callback function to find the video
4 application main window from the main windows.

1 27. The method of claim 25 wherein step h)
2 comprises the following step:
3 using a callback function to find the channel
4 related child window.

1 28. The method of claim 25 comprising the further
2 following step:
3 determining a program and/or station from an
4 electronic programming guide based upon the channel data
5 determined in step i).

1 29. The method of claim 21 wherein the viewing
2 device is a computer.

1 30. The method of claim 21 wherein the viewing
2 device is a television.

1 31. The method of claim 21 wherein the viewing
2 device is a combination of a television and a set top box.

1 32. The method of claim 21 wherein steps a), b),
2 and c) are implemented by software written in Java.

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1 33. A software meter arranged to meter video
2 displayed in a window on a screen of a viewing device, the
3 software meter being executed by a processor, the software
4 meter comprising:

5 a) first program code executable to determine
6 tuning data from a video application related to the
7 displayed video; and,

8 b) second program code executable to determine an
9 ancillary identification code relating to displayed video.

1 34. The software meter of claim 33 wherein the
2 second program code determines the ancillary identification
3 code from a device driver.

1 35. The software meter of claim 42 wherein the
2 device driver is a device driver for a video tuning card.

1 36. The software meter of claim 33 further
2 comprising third program code arranged to determine a
3 program and/or station from an electronic programming guide
4 based upon the tuning data.

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5 main window, (iv) find a channel related child window from
6 the child windows, and (v) determine channel data from the
7 channel related child window.

1 41. The software meter of claim 40 wherein the
2 first program code is arranged to use a callback function in
3 order to find the video application main window from the
4 main windows.

1 42. The software meter of claim 40 wherein the
2 first program code is arranged to use a callback function to
3 find the channel related child window.

1 43. The software meter of claim 40 further
2 comprising third program code arranged to determine a
3 program and/or station from an electronic programming guide
4 based upon the tuning data.

1 44. The software meter of claim 33 wherein the
2 software meter is written in Java.

1 45. A metering system for metering viewing of
2 video displayed in a window on a screen of a viewing device
3 comprising:

4 a software meter arranged to determine identifying
5 data related to the video displayed in the window; and,
6 a creditor arranged to apply a crediting rule in
7 determining whether to credit the identifying data.

1 46. The metering system of claim 45 wherein the
2 crediting rules comprises minimization, and wherein the
3 creditor comprises program code to credit the identifying
4 data only if the viewing window is not minimized.

1 47. The metering system of claim 45 wherein the
2 crediting rules comprises minimum window size, and wherein
3 the creditor comprises program code to credit the
4 identifying data only if the size of the viewing window is
5 greater than the minimum window size.

1 48. The metering system of claim 45 wherein the
2 crediting rules comprises an amount of occlusion of the
3 viewing window, and wherein the creditor comprises program
4 code to credit the identifying data only if the amount of

5 occlusion of the viewing window is less than a maximum
6 occlusion.

1 49. The metering system of claim 45 wherein the
2 crediting rules comprises a percentage of the screen
3 occupied by the viewing window, and wherein the creditor
4 comprises program code to credit the identifying data only
5 if the percentage of the screen occupied by the viewing
6 window is greater than a minimum percentage.

1 50. The metering system of claim 45 wherein the
2 viewing window is a first viewing window, wherein a second
3 viewing window is displayed on the screen, wherein audio is
4 being played with respect to one of the first and second
5 viewing windows, and wherein the creditor comprises program
6 code to credit the identifying data only with respect to the
7 one of the first and second viewing windows associated with
8 the audio.

1 51. The metering system of claim 45 wherein the
2 viewing window is a first viewing window, wherein a second
3 viewing window is displayed on the screen, wherein one of
4 the first and second viewing windows is a larger viewing

1 window, and wherein the creditor comprises program code to
2 credit the identifying data only with respect to the larger
3 viewing window.

1 52. The metering system of claim 45 wherein the
2 viewing window is a first viewing window, wherein a second
3 viewing window is displayed on the screen, wherein one of
4 the first and second viewing windows is a top-most viewing
5 window, and wherein the creditor comprises program code to
6 credit the identifying data only with respect to the top-
7 most viewing window.

1 53. The metering system of claim 45 wherein the
2 crediting rules comprises minimization and minimum window
3 size, and wherein the creditor comprises program code to
4 credit the identifying data only if the viewing window is
5 not minimized and the size of the viewing window is greater
6 than the minimum window size.

1 54. The metering system of claim 45 wherein the
2 crediting rules comprises minimization and an amount of
3 occlusion of the viewing window, and wherein the creditor
4 comprises program code to credit the identifying data only

5 if the viewing window is not minimized and the amount of
6 occlusion of the viewing window is less than a maximum
7 occlusion.

1 55. The metering system of claim 45 wherein the
2 crediting rules comprises minimization and a percentage of
3 the screen occupied by the viewing window, and wherein the
4 creditor comprises program code to credit the identifying
5 data only if the viewing window is not minimized and the
6 percentage of the screen occupied by the viewing window is
7 greater than a minimum percentage.

1 56. The metering system of claim 45 wherein the
2 crediting rules comprises minimum window size and an amount
3 of occlusion of the viewing window, and wherein the creditor
4 comprises program code to credit the identifying data only
5 if the size of the viewing window is greater than the
6 minimum window size and the amount of occlusion of the
7 viewing window is less than a maximum occlusion.

1 57. The metering system of claim 45 wherein the
2 crediting rules comprises minimum window size and a
3 percentage of the screen occupied by the viewing window, and
4 wherein the creditor comprises program code to credit the
5 identifying data only if the size of the viewing window is
6 greater than the minimum window size and the percentage of
7 the screen occupied by the viewing window is greater than a
8 minimum percentage.

1 58. The metering system of claim 45 wherein the
2 crediting rules comprises an amount of occlusion of the
3 viewing window and a percentage of the screen occupied by
4 the viewing window, and wherein the creditor comprises
5 program code to credit the identifying data only if the
6 amount of occlusion of the viewing window is less than a
7 maximum occlusion and the percentage of the screen occupied
8 by the viewing window is greater than a minimum percentage.

1 59. The metering system of claim 45 wherein the
2 crediting rules comprises minimization, minimum window size,
3 and an amount of occlusion of the viewing window, and
4 wherein the creditor comprises program code to credit the
5 identifying data only if the viewing window is not minimized

6 and the size of the viewing window is greater than the
7 minimum window size and the amount of occlusion of the
8 viewing window is less than a maximum occlusion.

1 60. The metering system of claim 45 wherein the
2 crediting rules comprises minimization, minimum window size,
3 and a percentage of the screen occupied by the viewing
4 window, and wherein the creditor comprises program code to
5 credit the identifying data only if the viewing window is
6 not minimized and the size of the viewing window is greater
7 than the minimum window size and the percentage of the
8 screen occupied by the viewing window is greater than a
9 minimum percentage.

1 61. The metering system of claim 45 wherein the
2 crediting rules comprises minimum window size, an amount of
3 occlusion of the viewing window, and a percentage of the
4 screen occupied by the viewing window, and wherein the
5 creditor comprises program code to credit the identifying
6 data only if the size of the viewing window is greater than
7 the minimum window size and the amount of occlusion of the
8 viewing window is less than a maximum occlusion and the

9 percentage of the screen occupied by the viewing window is
10 greater than a minimum percentage.

1 62. The metering system of claim 45 wherein the
2 predetermined crediting rule applied in step a) comprises
3 minimization, an amount of occlusion of the viewing window,
4 and a percentage of the screen occupied by the viewing
5 window, and wherein step b) comprises the step of crediting
6 viewing with respect to the viewing window only if the
7 viewing window is not minimized and the amount of occlusion
8 of the viewing window is less than a maximum occlusion and
9 the percentage of the screen occupied by the viewing window
10 is greater than a minimum percentage.

1 63. The metering system of claim 45 wherein the
2 crediting rules comprises minimization, minimum window size,
3 an amount of occlusion of the viewing window, and a
4 percentage of the screen occupied by the viewing window, and
5 wherein the creditor comprises program code to credit the
6 identifying data only if the viewing window is not minimized
7 and the size of the viewing window is greater than the
8 minimum window size and the amount of occlusion of the
9 viewing window is less than a maximum occlusion and the

10 percentage of the screen occupied by the viewing window is
11 greater than a minimum percentage.

1 64. The metering system of claim 45 wherein the
2 software meter has first program code to determine whether
3 the viewing device has a COM interface or an API interface
4 and second program code to determine channel data from a
5 channel related object of the COM interface or from
6 application related data associated with a video application
7 through the API interface.

1 65. The metering system of claim 64 wherein the
2 software meter has third program code to determine a program
3 and/or station from an electronic programming guide based
4 upon the channel data.

1 66. The metering system of claim 64 wherein the
2 software meter has third program code to determine channel
3 data from window text if the viewing device has neither a
4 COM interface nor an API interface.

1 67. The metering system of claim 66 wherein the
2 software meter has fourth program code to determine a
3 program and/or station from an electronic programming guide
4 based upon the channel data.

1 68. The metering system of claim 66 wherein the
2 software meter has fourth program code to find main windows,
3 wherein the software meter has fifth program code to find a
4 video application main window from the main windows, wherein
5 the software meter has sixth program code to find child
6 windows of the video application main window, wherein the
7 software meter has seventh program code to find a channel
8 related child window from the child windows, and wherein the
9 software meter has eighth program code to determine channel
10 data from the channel related child window.

1 69. The metering system of claim 68 wherein the
2 fourth program code uses a callback function to find the
3 video application main window from the main windows.

1 70. The metering system of claim 68 wherein the
2 sixth program code uses a callback function to find the
3 channel related child window.

1 71. The metering system of claim 68 wherein the
2 software meter has ninth program code to determine a program
3 and/or station from an electronic programming guide based
4 upon the channel data.

1 72. The metering system of claim 45 wherein the
2 software meter comprises:

3 a) first program code executable to determine
4 tuning data from a video application related to the
5 displayed video; and,

6 b) second program code executable to determine an
7 ancillary identification code relating to displayed video.

1 73. The metering system of claim 72 wherein the
2 second program code determines the ancillary identification
3 code from a device driver.

1 74. The metering system of claim 73 wherein the
2 device driver is a device driver for a video tuning card.

1 75. The metering system of claim 72 comprising
2 third program code arranged to determine a program and/or
3 station from an electronic programming guide based upon the
4 tuning data.

1 76. The metering system of claim 72 wherein the
2 first program code is arranged to (i) determine whether the
3 viewing device has a COM interface or an API interface, (ii)
4 determine channel data from a channel related object of a
5 COM interface if the viewing device has the COM interface,
6 and (iii) determine channel data from application related
7 data associated with a video application if the viewing
8 device has an API interface.

1 77. The metering system of claim 76 wherein the
2 first program code is arranged to determine channel data
3 from window text if the viewing device has neither a COM
4 interface nor an API interface.

1 78. The metering system of claim 77 comprising
2 third program code arranged to determine a program and/or
3 station from an electronic programming guide based upon the
4 tuning data.

1 79. The metering system of claim 77 wherein the
2 first program code is arranged to (i) find main windows,
3 (ii) find a video application main window from the main
4 windows, (iii) find child windows of the video application
5 main window, (iv) find a channel related child window from
6 the child windows, and (v) determine channel data from the
7 channel related child window.

1 80. The metering system of claim 79 wherein the
2 first program code is arranged to use a callback function in
3 order to find the video application main window from the
4 main windows.

1 81. The metering system of claim 79 wherein the
2 first program code is arranged to use a callback function to
3 find the channel related child window.

1 82. The metering system of claim 79 comprising
2 third program code arranged to determine a program and/or
3 station from an electronic programming guide based upon the
4 tuning data.

1 83. The metering system of claim 45 wherein the
2 software meter is written in Java.